

MassDEP C&D Subcommittee

One Winter Street, Boston

June 18, 2019 10:00 AM to 12:00 PM



Agenda

- Welcome/Safety/Introductions
- SWMP/C&D Action Plan Development
- 2018 C&D Facility Annual Report Summary Data
- Gypsum Wallboard Recycling Discussion
- Announcements/Updates

SWMP/C&D Action Plan Development

Status & Schedule Update

- Spring/Summer 2019: write draft plan
- Fall 2019: release public hearing draft
- Late 2020: publish final plan

| Detailed Material Categories | Estimated 2017 Disposal | 2030 Disposal (90% Goal) | 2030 Reduction (90% Goal) | 2030 Disposal (80% Goal) | 2030 Reduction (80% Goal) |
|--|----------------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|
| Remainder/Composite Metal | 75,510 | 71,735 | 3,776 | 71,735 | 3,776 |
| Glass | 73,567 | 59,581 | 13,986 | 60,501 | 13,066 |
| Glass Beverage Containers (non-MA deposit containers) | 25,048 | 17,534 | 7,514 | 18,035 | 7,013 |
| Other Glass Packaging Containers (non-MA deposit containers) | 15,889 | 14,300 | 1,589 | 14,459 | 1,430 |
| Glass MA Deposit Beverage Containers | 13,006 | 9,104 | 3,902 | 9,365 | 3,642 |
| Remainder/Composite Glass | 19,623 | 18,642 | 981 | 18,642 | 981 |
| Organic Materials | 1,426,393 | 793,536 | 632,858 | 843,303 | 583,090 |
| Food Waste | 1,184,006 | 592,003 | 592,003 | 639,363 | 544,643 |
| Branches and Stumps | 5,744 | 5,170 | 574 | 5,227 | 517 |
| Prunings, Trimings, Leaves and Grass | 114,257 | 79,915 | 34,342 | 82,265 | 31,992 |
| Manures | 3,621 | 3,621 | - | 3,621 | - |
| Remainder/Composite Organic | 118,764 | 112,826 | 5,938 | 112,826 | 5,938 |
| Construction and Demolition (in MSW and C&D streams) | 920,782 | 660,406 | 260,376 | 764,831 | 155,950 |
| Asphalt Pavement, Brick, and Concrete | 3,314 | 1,657 | 1,657 | 1,790 | 1,525 |
| Aggregates, Stone, Rock | 19,993 | 9,996 | 9,996 | 10,796 | 9,197 |
| Wood – Treated | 298,516 | 277,486 | 21,030 | 283,590 | 14,926 |
| Wood – Untreated | 233,435 | 98,180 | 135,255 | 126,055 | 107,380 |
| Asphalt Roofing | 70,309 | 27,072 | 43,238 | 63,982 | 6,328 |
| Drywall/Gypsum Board | 45,861 | 41,732 | 4,129 | 41,734 | 4,128 |
| Carpet and Carpet Padding | 174,616 | 133,461 | 41,155 | 165,885 | 8,731 |
| Remainder/Composite Construction and Demolition | 74,737 | 70,822 | 3,916 | 71,000 | 3,737 |

Excerpt: Draft Analysis of 2030 Waste Reduction Potential

<https://www.mass.gov/doc/draft-analysis-of-2030-waste-reduction-potential>

SWMP/C&D Action Plan Development

DRAFT C&D Waste Reduction Goal

Goal: By 2030, reduce the disposal of C&D materials by 250,000 tons annually, based off of a 2017 baseline of estimated C&D waste managed through both MSW and C&D handling facilities. These annual disposal reductions will be advanced primarily through four strategies:

- Improved operational performance of C&D Material Processors
- Optimize diversion of C&D materials from MSW Handling Facilities to C&D Material Processors
- Encourage donation and reuse of high value building materials to reduce C&D waste generation
- Promote jobsite source separation of materials that adversely impact operational performance of C&D processors

Challenge: How do we capture entire universe of C&D materials management?

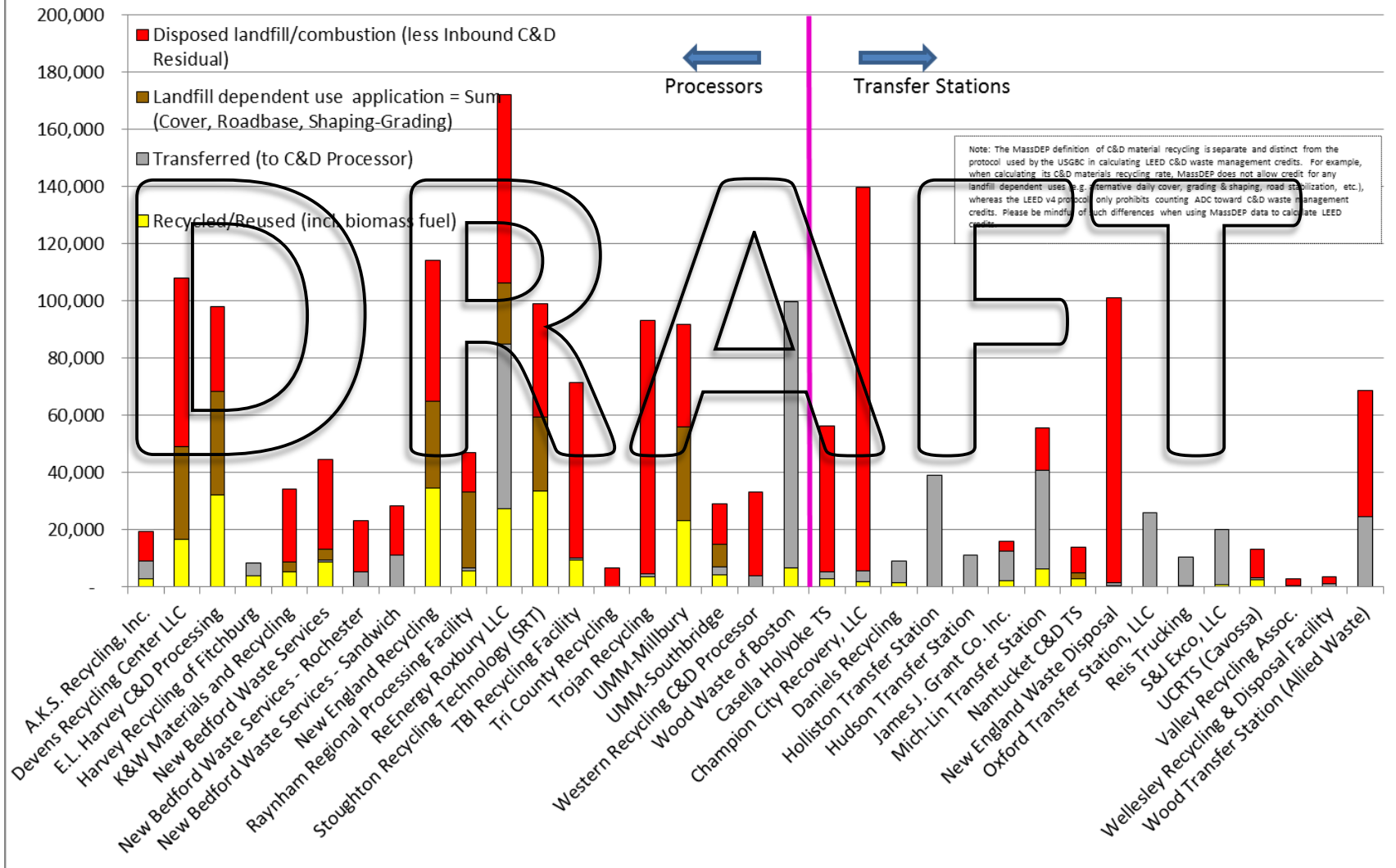
- Current annual report data only captures Solid Waste Handling Facilities
- What about:
 - Source separated material generated at construction jobsites
 - C&D material shipped to out-of-state processors
 - C&D materials donated/reused
 - C&D materials not otherwise reported

Preliminary CY2018 C&D Annual Report Summary Data

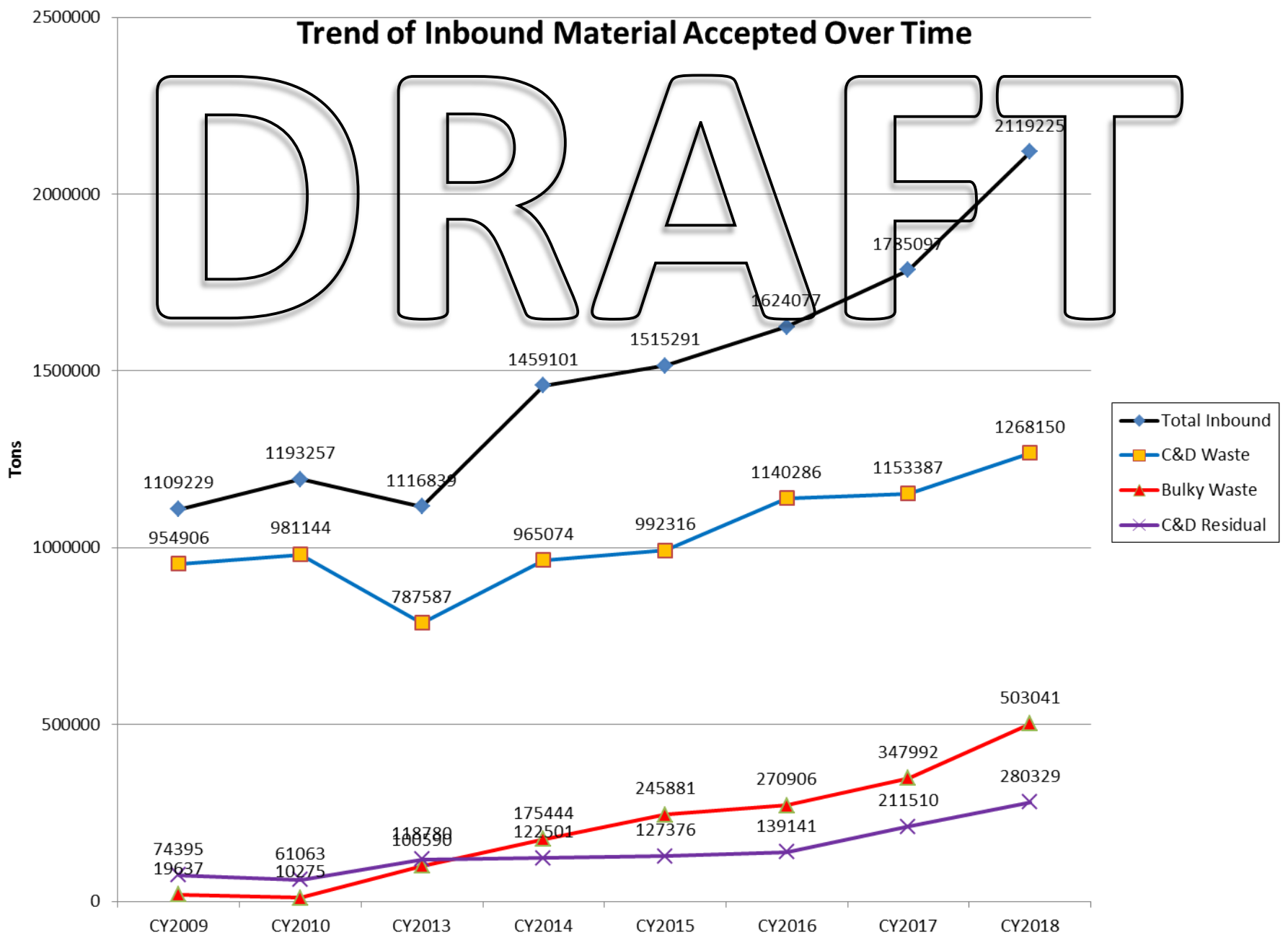
DRAFT - Massachusetts C&D Handling Facilities - DRAFT

Tons of C&D Accepted and Handled by Facility in 2018*

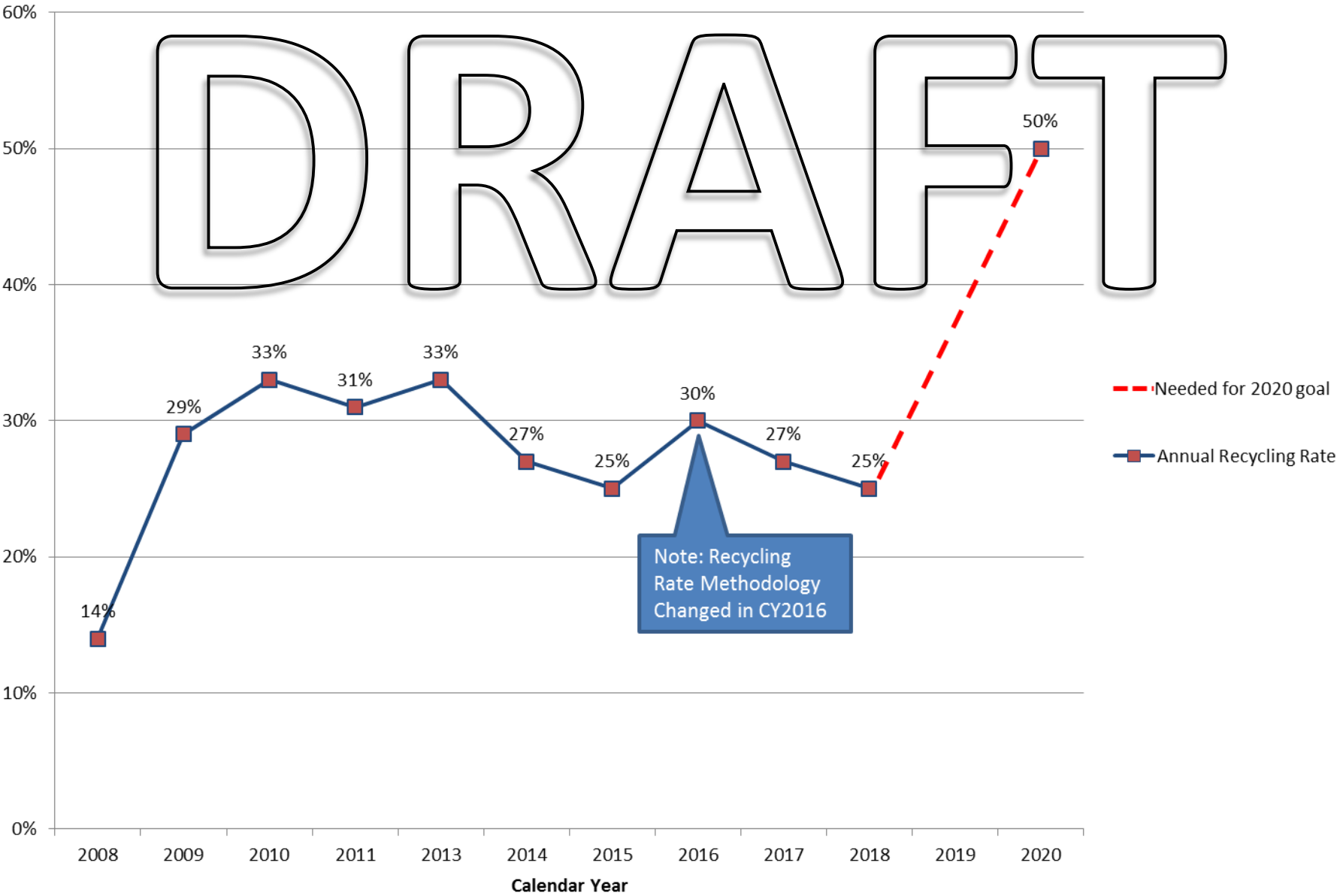
*Quantities are "as reported" to MassDEP in CY2018 C&D Annual Facility Reports



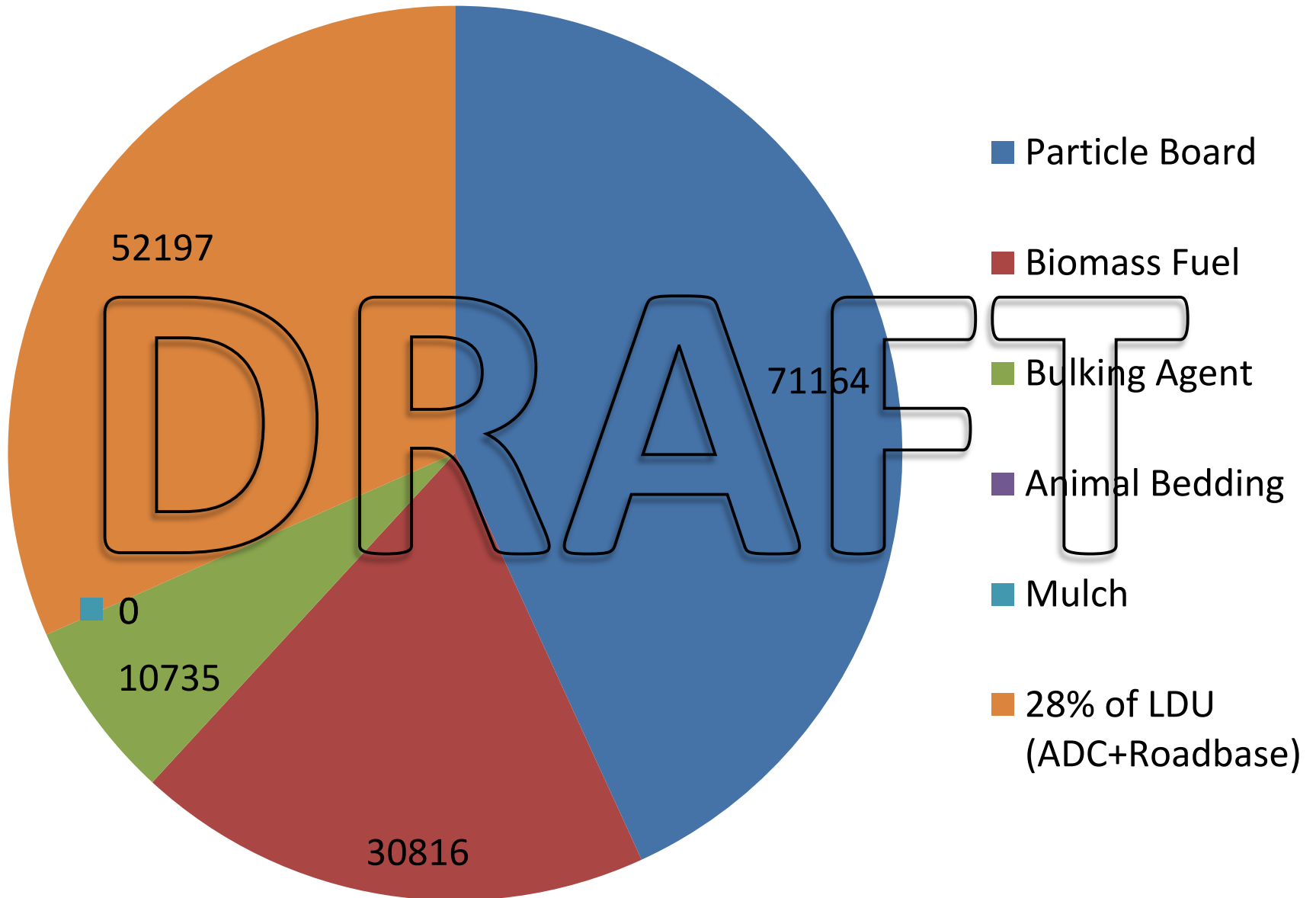
Trend of Inbound Material Accepted Over Time



C&D Annual Recycling Rate Trend Chart



CY2018 Wood Products Recovered (164,912 tons total)



CY2018 Other Processed Materials Recovered

| | CY2018 | | |
|-----------------|------------------|--------------------|---------------------|
| Facility | Gypsum Recovered | C&D Waste Accepted | % of Total accepted |
| E.L. Harvey | 609 | 83113 | 0.73% |
| NER | 350 | 112199 | 0.31% |
| Harvey | | | |
| Fitchburg | 146 | 5184 | 2.82% |
| Raynham | 37 | 47266 | 0.08% |
| UMM-Millbury | 24 | 72664 | 0.03% |
| Trojan | 17 | 29092 | 0.06% |
| UMM-Southbridge | 14 | 19879 | 0.07% |
| SRT | 12 | 68805 | 0.02% |
| AKS | 0 | 34743 | 0.00% |
| Devens | 0 | 89571 | 0.00% |
| K&W | 0 | 28715 | 0.00% |
| NBWS | 0 | 15206 | 0.00% |
| NBWS-Rochester | 0 | 4920 | 0.00% |
| NBWS-Sandwich | 0 | 11086 | 0.00% |
| RER | 0 | 133019 | 0.00% |
| TBI | 0 | 30644 | 0.00% |
| Tri County | 0 | 744 | 0.00% |
| Western | 0 | 8336 | 0.00% |
| Wood Waste | | | #DIV/0! |
| Total | 1209 | | |

| | CY2018 | | |
|-----------------|----------------------------|--------------------|---------------------|
| Facility | Asphalt Shingles Recovered | C&D Waste Accepted | % of Total accepted |
| Harvey | | | |
| Fitchburg | 2759 | 5184 | 53.22% |
| E.L. Harvey | 179 | 83113 | 0.22% |
| Trojan | 67 | 29092 | 0.23% |
| NER | 19 | 112199 | 0.02% |
| AKS | 0 | 34743 | 0.00% |
| Devens | 0 | 89571 | 0.00% |
| K&W | 0 | 28715 | 0.00% |
| NBWS | 0 | 15206 | 0.00% |
| NBWS-Rochester | 0 | 4920 | 0.00% |
| NBWS-Sandwich | 0 | 11086 | 0.00% |
| Raynham | 0 | 47266 | 0.00% |
| RER | 0 | 133019 | 0.00% |
| SRT | 0 | 68805 | 0.00% |
| TBI | 0 | 30644 | 0.00% |
| Tri County | 0 | 744 | 0.00% |
| UMM-Millbury | 0 | 72664 | 0.00% |
| UMM-Southbridge | 0 | 19879 | 0.00% |
| Western | 0 | 8336 | 0.00% |
| Wood Waste | | | #DIV/0! |
| Total | 3024 | | |

Clean Gypsum Wallboard - 1209 tons

Asphalt Roofing Shingles - 3024 tons

Gypsum Wallboard Recycling Discussion

- Overview/Framework (Jim Newman, Linnean Solutions)
- RBDG (Josh Cook, MassDEP)
- Stakeholder Feedback (Abbey Massaro, Recycling Works)
- Gypsum Recycler Introductions



Source: CDRA

MassDEP Recycling Business Development Grant Program

RBDG: Intended to enhance waste reduction and recycling programs for Massachusetts based businesses.

- Grants awards range from \$50K to \$400K for eligible projects
- Match: grantee must contribute 25% of project investment
- Performance based component extends over 18 – 24 months

CY2019 Grant Cycle

- Application found at: <https://www.mass.gov/how-to/recycling-business-development-grants>
 - CY2019 target materials include: Clean Gypsum Wallboard – processing and recycling of clean wallboard
- Deadline:
 - October 4, 2019

ANNOUNCEMENTS/UPDATES...

CDRA Updates

- Presented by Bill Turley, CDRA Executive Director
 - EPA/America Recycles Day
 - Legislative Roadmap
 - C&D Fines/Biochar
 - ConExpo-ConAgg
 - SWEEP



For More Information:

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